GOVERNMENT OF INDIA
ATOMIC ENERGY
LOK SABHA

UNSTARRED QUESTION NO:3880
ANSWERED ON:09.08.2017
Availability of Uranium
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Will the Minister of ATOMIC ENERGY be pleased to state:

(a)whether the current annual production of Uranium in the country is enough to meet the annual fuel requirement of all the operational uranium−based Nuclear Power Plants and if so, the details thereof;

(b)if not, the steps taken/being taken by the Government to explore alternative fuel/technologies/imported fuel for the said purpose;

(c)the details of estimated uranium reserves and extraction potential in the country, uranium mine-wise and State/UT-wise and the details of the uranium extracted during each of the last three years, uranium mine-wise and State/UT-wise along with the fund allocated and utilised thereon in the said period;

(d)the steps taken by the Government to undertake more uranium exploration activities in various States including Andhra Pradesh; and

(e)whether the country is importing uranium from other countries and if so, the details thereof during the said period including the quantity of imported uranium along with the fund spend thereon, country-wise?

Answer

THE MINISTER OF STATE FOR PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND PRIME MINISTER'S OFFICE (DR. JITENDRA SINGH):

(a)Yes Sir. Out of 22 Nuclear reactors, presently in operation 8 reactors with aggregate capacity of 2400 MW are fuelled by indigenous uranium. These
reactors are now being operated close to their rated capacity. 14 reactors with an aggregate capacity of 4380 MW are under IAEA Safeguards and use imported uranium.

(b)Does not arise.

(c)Atomic Minerals Directorate for Exploration and Research (AMD), a constituent unit of Department of Atomic Energy (DAE), which has a mandate to identify and evaluate mineral resources of uranium, has so far established 2,70,636 tonne (t) in situ uranium oxide (U3O8) [2,29,499 t U] as on July, 2017.

The uranium deposits established by AMD are mined by Uranium Corporation of India Limited (UCIL), a Public Sector Undertaking (PSU) of DAE. The deposits at Jaduguda, Narwapahar, Bagjata, Bhatin, Banduhurang, Turamdih and Mohuldih in Jharkhand and Tummalapalle in Andhra Pradesh are currently under exploitation by UCIL. It is not in the public interest to disclose the indigenous uranium extraction details.

State-wise details of the uranium resources, including Karnataka, are given below:
State District Name of the deposit Uranium reserve
U3O8 (t) U (t)
Andhra Pradesh Kadapa Tummalapalle Group 1,41,780 1,20,229
Guntur Koppunuru 2,761 2,341
Sub-total 1,44,541 1,22,570
Telangana
Nalgonda Lambapur 1,450 1,230
Peddagattu 7,585 6,432
Chitrial 9,515 8,069
Sub-total 18,550 15,731
Jharkhand
East Singhbhum
Jaduguda 8,038 6,816
Bhatin 1,700 1,442
Narwapahar (
NWP) + NWP Extn. 11,780 9,990
Narwapahar
(Deeper + Khundungri) 2,503 2,122
Turamdih Group 11,510 9,761

Banduhurang 6,489 5,502
Bagjata 1,860 1,577
Mohuldih 3,330 2,824
Garadih 1,270 1,077
Kanyaluka 1,970 1,670
Nimdih 815 691
Rajgaon 1,200 1,018
Singridungri-Banadungri 10,315 8,747
Saraikela-Kharswan
Bangurdih 1,612 1,367
Sub-total 64,392 54,604
Meghalaya
West Khasi Hills KPM (Domiasiat) 9,500 8,056

Wahkyn 5,381 4,563
Gomaghat-Phlangdiloin 1,000 848
Tyrnai 600 509
Lostoin 869 737
Wahkut 4,155 3,523
Umthongkut 1,535 1,302
Sub-total 23,040 19,538
Rajasthan
Sikar Rohil 8,261 7,005
Udaipur Umra 1,160 984
Sub-total 9,421 7,989
Karnataka
Yadgir Gogi 4,267 3,618
South Kanara
Walkunji-Yellakki 415 352
Sub-total 4,682 3,970
Chhattisgarh
Rajanandgaon Bodal 1,530 1,298
Bhandaritola 518 439
Surguja Jajawal 1,438 1,219
Dhumath-Dhabi 500 424
Sub-total 3,986 3,380
Uttar Pradesh
Sonbhadra
Naktu 785 666
Sub-total 785 666
Uttarakhand
Rudraprayag
Pokhri-Tunji 100 85
Sub-total 100 85
Himachal Pradesh
Una Rajpura 364 309
Shimla Kasha-Kaladi 200 170
Mandi Tileli 220 186
Sub-total 784 665
Maharashtra
Gondia Mogarra 355 301
Sub-total 355 301

Grand total 2,70,636 2,29,499
[1t U3O8 = 0.848 t uranium metal (U)]

Funds allocated and utilized by Uranium Corporation of India Limited (UCIL), a Public Sector Undertaking (PSU) of Department of Atomic energy (DAE), in last three years is as follows:

Rs.in Crore
Year Fund allocated,i.e., Budgetary Support (BS) Fund Utilized, i.e., Budgetary Support (BS) and fund from Internal and Extra Budgetary Resources (IEBR)
2014-15 79 14.78
2015-16 32 249.18
2016-17 25 45.84
Total 136 309.80

Excess fund of Rs.173.8 Crore utilised on account of cost overrun of Rs.566 Crore for Tummalapalle project which is yet to be approved by the Government.

(d)Atomic Minerals Directorate for Exploration and Research (AMD), a constituent unit of Department of Atomic Energy (DAE), which has a mandate to identify and evaluate mineral resources of uranium, is presently carrying out integrated, multi-disciplinary exploration for uranium in several potential thrust areas of the country, including Andhra Pradesh, by utilising state-of-the-art technology in remote-sensing, geological, radiometric, geochemical, heliborne / ground geophysical surveys and drilling. Besides, various laboratories equipped with modern and high-tech instruments are providing timely and accurate analytical support to the on-going exploration programme.

Important areas which are currently under survey and/or prospecting to augment uranium resources include:

1.Tummalapalle − Motunutulapalle − Kanampalle - Gidankivaripalle, Kamagutapalle - Kammapalle, Kadapa district, Veldurthi - Ramallakota, Kurnool district, Subbareddipalem, Guntur district, Andhra Pradesh and Mathampalli-Mellacheruvu, Nalgonda district, Telangana

2.Gogi-Kanchankayi, Darshanapur, Yadgir district, Suldhal − Gujanal, Belgaum district, Karnataka and Pudur, Krishnagiri district, Tamil Nadu

3.Singridungri-Banadungri, Hitku, Rajdah, East Singhbhum district and Bangurdih, Gurulpada-Nayadih, Galudih-Sankadih, Mahalimurup-Dugridih, Seraikela-Kharsawan district, Jharkhand

4.Wahkut-Kulang, Southwest Khasi Hills district, Waiting-Umla, West Khasi Hills district, Anek-Rongmalgiri, West Garo Hills district, Meghalaya and Hanspani-Chilimkhola; Mikir Hills, KarbiAnglong, Nagaon districts, Assam

5.Rohil, Narsinghpuri, Sikar district, Jahaz-Maota, Jamalpur, Jhunjhunu district, Umra, Udaipur district, Loha-Padihara, Churu district, Rajasthan and Than−Muli, Surendranagar district, Gujarat

6.Rambas-Gorir, Mahendragarh district, Haryana, Rajpura − Polian, Una district, Himachal Pradesh and Naktu-Anjangira, Sonbhadra district, Uttar Pradesh

Dharangmau − Kachhar, Betul district, Barhi-Sleemnabad; Jabalpur, Katni, Shahdol districts, Madhya Pradesh, Bhandaritola, Rajnandgaon district and Pakni, Surajpur district, Chhattisgarh

(e) Yes, Sir. The country-wise details of imports of uranium with funds spend thereon are tabulated below:

Year	Source	Item	Quantity(MT)	Expenditure (Rs.in crore)
2014-15	M/s. TVEL, Russia	UO2 Pellets	296.54	401.49
	M/s.Kazatomprom, Kazakhstan	UOC	283.42	216.93
2015-16	M/s.Cameco, Canada	UOC	250.74	158.28
	M/s. TVEL, Russia	EUO2 Pellets	42.15	303.65
		UO2 Pellets	303.78	565.17
2016-17	M/s.Kazatomprom, Kazakhstan	UOC	923.85	304.21
		UOC	999.80	590.12
	M/s.Cameco, Canada	UOC	1233.68	538.34
	M/s. TVEL, Russia	UO2 Pellets	187.33	395.29

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